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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/765,675	01/22/2001	Veronique Douin	05725.0830	6349

22852 7590 12/23/2004

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EXAMINER
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YU, GINA C

ART UNIT	PAPER NUMBER
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1617

DATE MAILED: 12/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/765,675

Applicant(s)

DOUIN ET AL.

Examiner

Gina C. Yu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE \_\_\_\_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-62 and 64-83 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-62 and 64-83 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

### DETAILED ACTION

The amendment filed on October 25, 2004 after a decision by the Board of Patent Appeals and Interferences ("the Board") is entered. In view of the applicants' amendment, the rejection of record as set forth in 35 C.F.R. § 196. (b) by the Board in Paper No. 24, is hereby withdrawn.

It is noted that the Board reversed the examiner's rejection on appeal for the following deficiency with respect to claim 63: the cited references did not teach the specific turbidity range claimed by applicants. Claim 63 is now canceled and the limitation is incorporated into independent claims, Claims 1, 64, 68-73, 75, and 77. New references, Knowlton (Pouchers' Perfume, Cosmetic and Soap, Emulsion Theory), and Margosiak et al. (US. Pat. No. 6,533,873), are cited herein to show that the claimed turbidity range would have been obvious to one of skilled in emulsion art.

With respect to Claims 78-82, the Board indicated that prima facie case of obviousness is not shown because the examiner did not sufficiently indicate the claimed nonionic amphiphilic lipids comprising "at least one hydrophobic block and at least one hydrophilic block" is found in the cited reference, Restle et al. (EP 0842652 A1). This Office action will address the deficiency by discussing the same reference in a full English translation to clearly point out that the claimed ~~the~~ nonionic amphiphilic lipid surfactant compounds taught by the prior art meet that limitation.

With respect to Claims 64-67, the Board reversed the examiner's rejection because of the lack of evidence to show that a skilled artisan would have been motivated to select the aminosilicone of Decoster et al. (Abstract, JP 10338899A) to

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make a detergent composition. In this rejection, the full English translation of the Japanese reference will be discussed to show the motivation to combine the references and a reasonable expectation of successfully producing the claimed invention.

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

(A) Claims 1-19, 21-23, 28-62, and 68-83 are rejected under 35 U.S.C. 103(a) as being unpatentable over Restle et al. (EP 0842652 A1) in view of Ziegler et al. (U.S. Pat. No. 5,135,748) and Margosiak et al. (US 6533873 B1) and Knowlton (Poucher's Perfumes, Cosmetics, and Soaps, Emulsion Theory).

Restle et al. teach an oil-in-water emulsion wherein the oil globules have size of less than 150nm, comprising an amphiphilic lipid phase containing at least one non-ionic amphiphilic lipid phase and at least one cationic amphiphilic lipid. See English translation, Description. See instant claims 1 and 23. The amount of oil to the amount of amphiphilic lipid phase range from 2:1 to 10:1. See instant claims 2, 3, 28, and 29. See English translation, p. 2, 1<sup>st</sup> par. – p. 4, 1<sup>st</sup> par. The average size of the oil globules is disclosed. See claim 4. The nonionic amphiphilic lipids and the use thereof as described by instant claims 17-19, 21 and 22 are disclosed in p. 4, 2<sup>nd</sup> par. – p. 6, bridging par. The cationic amphiphilic lipids of instant claims 30-58 are disclosed in p. 7, 1<sup>st</sup> full par. – p. 6, 1<sup>st</sup> par. The oil described in instant claims 59 – 62 are disclosed in p. 6, 2<sup>nd</sup> par. – p. 18, last par. The use of the emulsion in the form of lotion, serum or gel for therapeutic or non-therapeutic cosmetic purposes is disclosed in pp. 20-21. See

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claims 68-83. As for Claims 78-82, Restle teaches the nonionic amphiphilic lipids having both hydrophobic and hydrophilic block, which are the silicone surfactants shown in p. 4, 2<sup>nd</sup> full par. – p. 6, last full par.

The reference lacks the teaching of the cationic polymers of claims 5-16.

Ziegler et al. teach a cosmetic o/w composition comprising quaternary ammonium phosphate esters and 0.10-10% by weight of cationic polymers which meet the limitation of claims 5-16. See col. 2, lines 2 – 14; col. 2, line 17 – col. 6, line 11. The reference teaches the composition provides stability against phase separation during freeze-thaw cycles and is effective in moisture retention.

Restle et al. and Ziegler et al. fail to teach that the nanoemulsion whose average oil particle size of 150 nm has the turbidity as claimed by applicants.

Knowlton teaches that in emulsion art, “when the particle size falls below 0.1 microns (100 nm) the emulsions appear blue-gray to translucent, to transparent.” See p. 552, 3<sup>rd</sup> full par., Table 19.2.

Margosiak et al. teach that a gel formulation having a clear appearance has a turbidity less than or equal to 105 NTU, which is within the claimed turbidity range by applicants. See col. 2, lines 2-4.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the composition of Restle et al. by adding the cationic polymers, as taught by Ziegler et al., because of the expectation of successfully producing a cosmetic composition with enhanced stability and moisture retention.

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It would have been obvious to one of ordinary skill in the art that the Restle nanoemulsion whose average particle size of oil globules is smaller than 150 nm is translucent to transparent, as suggested by Knowlton, and has turbidity at or below 150 NTU, as suggested by Margosiak et al.

(B) Claims 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Restle et al., Ziegler et al., Knowlton, and Margosiak et al. as applied to claims 1-19, 21-23, 30-62, and 68-83 above, and further in view of Simonnet (EP 078114 A1).

Restle et al., Ziegler et al., Knowlton, and Margosiak et al. are discussed above. The combined references fail to teach the amphiphilic anionic lipids claimed by applicants.

Simonnet teaches a transparent oil-in-water emulsion for cosmetic use wherein the oil globules have a mean size of less than 100nm and at least one silicone surfactant. See p. 1, line 2 – 11. The use of up to 20% of ionic amphiphilic lipids, including anionic lipids, amphoteric ionic lipids are disclosed in p. 3, line 33 – p. col. 4, line 6. See instant claims 17 and 21 - 29. See also Examples. The reference also teaches that emulsions with particle size less than 100nm are transparent similar to water, and further teaches that when the particle size is 57nm the transparency of the composition is 67%. See p. 2, lines 9 – 11; p. 6, lines 25-6.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the composition of the combined references by adding the anionic amphiphilic lipids as taught by Simonnet because of the expectation

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of successfully producing a transparent cosmetic emulsion composition with well known surfactants in the art.

C) Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Restle et al., Ziegler et al., Knowlton, Margosiak et al., Simonnet as applied to claims 1-19, 21-62, and 68-83 above, and further in view of Matzik et al. (U.S. Pat. No. 5,716,418).

Restle et al., Ziegler et al., Simonnet are discussed above. The combined references fail to teach the anionic amphiphilic lipids of instant claim 20.

Matzik et al. teach hair coloring composition containing anionic surfactants including fatty alkyl ether citrates. See col. 1, line 50 – col. 2, line 38.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the composition of the combined references by adding the anionic amphiphilic lipid as taught by Matzik et al. because of the expectation of successfully producing cosmetic composition with a known surfactant in the art.

(D) Claims 64-67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Restle et al., Ziegler et al., Knowlton, Margosiak et al., Simonnet, and Matzik et al., as applied to claims 1-62 and 68-83 above, and further in view of Decoster et al. (English translation of JP H10-338899).

Restle et al., Ziegler et al., Simonnet, and Matzik et al., are discussed above. Restle further teaches that the nanoemulsion is applicable in making washing and cleansing formulations for hair and skin. See translation, p. 20, 2<sup>nd</sup> par. – p. 21, last par.

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Shampoo is taught. See p. 20, 3<sup>rd</sup> par. While Restle teaches to incorporate skin-conditioning agents, the combined references fail to teach aminosilicone. See p. 18, last par.

Decoster et al. teach cosmetic detergent composition comprising 0.05-5 weight % of aminosilicone, anionic surfactant, amphoteric surfactants and cationic polymers. See translation, p. 16, [0015] – p. 25, [0025]. The reference teaches that the specific hair conditioning system, comprising the aminosilicone and cationic polymer (quaternary ammonium compounds), provides cosmetic benefits, which includes disentangling, softness, the silkiness and volume, while retaining good washing property. See translation, p. 12, [0008]-p. 13, [0009].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the composition of the combined references by adding the aminosilicone, as motivated by Decoster et al., because 1) Restle et al. and Decoster et al. are directed to hair and skin cleansing compositions, specifically shampoo and skin cleansing compositions; 2) Decoster et al. teach that the amino silicone/cationic polymer combination provides hair or skin conditioning benefits while retaining good washing properties; and 3) Restle teaches to incorporate skin conditioning active components, including silicones.

The skilled artisan would have had a reasonable expectation of successfully producing a nanoemulsion hair shampoo or body wash composition with improved or similar conditioning benefits because 1) Restle teaches the applicability of the nanoemulsion in shampoo or skin cleansing formulations and 2) Decoster also teaches



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the applicability of the conditioning system in detergent compositions, and 3) both references teach using quaternary ammonium cationic polymers.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gina C. Yu whose telephone number is 571-272-0635. The examiner can normally be reached on Monday through Friday, from 8:30 AM until 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan can be reached on 571-272-0629. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Gina C. Yu  
Patent Examiner  
December 23, 2004

A handwritten signature in black ink, appearing to read 'Sreeni Padmanabhan', with a horizontal line underneath the name.

**SREENI PADMANABHAN  
SUPERVISORY PATENT EXAMINER**